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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,611	01/26/2001	Keisei Yamamuro	FUR0010-PCT	1619
7055	7590	05/19/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			SHANNON, MICHAEL R	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/744,611	Applicant(s) YAMAMURO ET AL.	
	Examiner Michael R. Shannon	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20041129, 20041210</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 11-17, filed 28 February 2005, with respect to the rejection(s) of claim(s) 13 under 35 U.S.C 102(b) as being anticipated by Beyers II et al (USP 5,381,477), and 1-12 and 15-17 under 35 U.S.C 103(a) as being unpatentable over Beyers in view of Eda et al (USP 5,760,820) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Terakado et al (USP 6,311,329), cited by examiner and Eda et al as presented below.

The Applicant has canceled claim 14.

Applicant expressed disagreement over the fact that Beyers taught a system that uses a form ID to identify a form for displaying the sub contents data. The Examiner originally cited "the claimed program ability to determine an output form of sub contents data in accordance with a predetermined output form for an output form ID is met by the layouts stored in the ROM and accessed via the transaction code." After closer review and examination of the Beyers reference and the Applicants' arguments, the Examiner agrees and has withdrawn the rejection. The fact that the transaction code of Beyers, as discussed, simply sets settings for the display of a message and does not point to a pre-defined and stored template does not meet the "form ID" concept for pointing to and utilizing a pre-stored form for display of the sub contents data. Upon further consideration and further search, however, the Examiner presents the following new grounds of rejection in view of Terakado et al.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Terakado et al (USP 6,311,329), cited by examiner.

To serve as a brief overview, the Terakado reference discloses a system for receiving EPG layouts and EPG data separately (through separate mediums or at different times) in order to facilitate the rapid download and changing of data. In normal EPG systems, screen layouts and data are downloaded simultaneously, and therefore upon a change in programming the whole EPG must be downloaded causing a great delay since the EPG as a whole contains a great deal of layout information. Instead, the Terakado reference discloses EPG layout screens, which are stored in the receiving device (through CD-ROM input, pre-download, or the like) and uses downloaded program information to identify what EPG layout screen to use. Therefore, only the data must be downloaded upon a change or an EPG access and filled in to the pre-existing EPG layout screen. The types of data present in the system are "A data", "B data", and "C data". "A data", which is the data of concern in this immediate office action is then

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further divided into "A1 data" (data which may be possibly changed such as broadcasting time or date), "A2 data" (data which are not changed at all such as program name), and "A3 data" (data which is composed of comparatively large data such as pictures, moving pictures, voice and so forth).

Regarding **claim 13**, the claimed "reconstruction program for controlling reconstruction of main contents and sub contents, wherein the reconstruction program determines an output form of sub contents data in accordance with a predetermined output form for an output form ID in the sub contents data in accordance with output contents data in the sub contents data, so as to perform reconstruction control of the sub contents data" is met by the layout of an EPG being selected based on the "A data" concerning the program broadcast [col. 7, lines 36-43]. The "A1 data" (as seen on Figure 4A) can contain a "Program Category" or "Broadcasting Type", which are used to identify what EPG layout to use. Figure 7 shows program detail information that is displayed according to the EPG layout upon detection of the difference kinds of program categories serving as form ID's. The "reconstruction program" is met by the "A data" being stored in memory and read out and extracted for data converting to B data in response to the layout selected based on program category or broadcasting type [col. 7, lines 53-61]. The construction of the B1 data and B2 data are therefore different depending on the screen layout (as selected based on program category as in Figure 7). The main contents data in this case being the Broadcasting Date, Time, and Station, and the sub contents being the Program Category and Broadcasting Type.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12, and 15-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Terakado et al (USP 6,311,329), cited by examiner, in view of Eda et al (USP 5,760,820), previously cited by examiner.

To serve as a brief overview of Eda, the reference discloses a system for the delivery of emergency information through the use of multiplexed video, audio, and emergency information signals making up the transport stream

Regarding **claim 1**, the Terakado reference discloses the following within the transmission device:

- The “output form ID that indicates an output form of the sub contents, and output contents data that indicate output contents”, as claimed, is met by the Broadcasting Date, Time, and Station, which is the output contents data that is created in the data editor 31 of Figure 3 and displayed at the display device according to the layout selected by the “Program Category” and “Broadcasting Type” of the sub contents represented in the A1 data [col. 6, line 60 – col. 7, lines 7].

The Terakado reference further discloses the following within the reception device:

- The “reconstruction portion for controlling reconstruction of main contents and sub contents in accordance with the received transport stream”, as claimed, is met by the “A data” being stored in memory and read out and extracted for data converting to B data in response to the layout selected based on program category or broadcasting type [col. 7, lines 53-61]. The construction of the B1 data and B2 data are therefore different depending on the screen layout (as selected based on program category as in Figure 7).
- The “reconstruction portion for determining the output form of the sub contents data in accordance with an output form that is predetermined for the output form ID in the received sub contents data, and determining the output contents of the sub contents data in accordance with the output contents data in the received sub contents data, so as to perform the reconstruction control of the sub contents data”, as claimed, is met by the layout of an EPG being selected based on the “A data” concerning the program broadcast [col. 7, lines 36-43]. The “A1 data” (as seen on Figure 4A) can contain a “Program Category” or “Broadcasting Type”, which are used to identify what EPG layout to use. Figure 7 shows program detail information that is displayed according to the EPG layout upon detection of the difference kinds of program categories serving as form ID’s. The “reconstruction program” is met by the “A data” being stored in memory and read out and extracted for data converting to B data in response to

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the layout selected based on program category or broadcasting type [col. 7, lines 53-61]. The construction of the B1 data and B2 data are therefore different depending on the screen layout (as selected based on program category as in Figure 7). The output contents data in this case being the Broadcasting Date, Time, and Station, and the output form ID (identification of the output form) being the Program Category and Broadcasting Type.

The Terakado reference does not disclose “a multiplex portion for multiplexing at least main contents data and sub contents data so as to generate a transport stream and “a transmission portion for transmitting the transport stream generated by the multiplex portion, and the multiplex portion generating the sub contents data” including the output form ID and the actual data (as discussed above) within the transmission device. The Eda reference discloses a multiplexer for multiplexing main contents (digital video and audio signals) and sub contents (digital information signal of text) and a transmitter for transmitting the multiplexed information to the subscribers [col. 7, lines 11-44]. Also, the Eda reference discloses that the multiplexer portion generates the sub contents data (digital information signal of text) using the information stream generator 107 [col. 7, lines 11-44].

The Terakado reference further does not disclose, “a reception portion for receiving the transport stream transmitted by the transmission device” within the reception device. The Eda reference discloses a receiver which utilizes a bit stream input terminal 201, a decoder 203, a demultiplexer 202, and a discriminator 204 for

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receiving the transport stream transmitted by the transmission device [col. 8, line 65 – col. 9, line 7].

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the intricate details of transmission and reception using a multiplexed system, as taught by Eda, into the system of Terakado, in order to allow for a simple way to transmit extra information (such as data or text) while still only using a single transport stream, therefore making the process compatible with current multiplexed transmission and reception system and as well as making it stream-lined and straight-forward.

Regarding **claim 2**, see the above rejection for the transmission device of claim 1.

Regarding **claim 3**, see the above rejection for the reception device of claim 1.

Regarding **claim 4**, Terakado and Eda teach all that is discussed above with regards to claim 1. Terakado further teaches a 'Screen Layout Data' section at the receiving device [Fig. 3], which stores layout information that is matched to a "program category" broadcast by the transmission device according to the table found in Figure 7. This teaching meets the claimed recorded output form table describing the output form ID and the output form corresponding thereto.

Regarding **claim 5**, Terakado and Eda teach all that is discussed above with regards to claim 1. Terakado further teaches a "C data" creation mechanism and a "Display Change Processing" mechanism, which serve to take Screen layout Data and B data (created from the A data) and define a display position for each of the data

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elements [col. 8, line 66 – col. 9, line 6]. This teaching meets the claimed ability of the output form to include a display position of the sub contents.

Regarding **claim 6**, Terakado and Eda teach all that is discussed above with regards to claim 1. Terakado further teaches what data is output and what data is not. According to the table of Figure 7, the program category can determine which data is output using the screen layout information [col. 8, lines 47-53]. This teaching meets the claimed ability for the output form to include information about whether the sub contents are outputted or not.

Regarding **claim 7**, Terakado and Eda teach all that is discussed above with regards to claim 1. Neither Terakado nor Eda teach that the claimed, “output form includes at least an output time of the sub contents”. The Examiner, however, takes Official Notice that it is notoriously well known in the art to display warnings and commercials at specific times according to a schedule pre-set by the transmitter. It therefore would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the timing of warning messages into the output form, in order to make the timing work with the current template/layout teaching and incorporate the same idea of timing warnings into a layout pre-defined template form.

Regarding **claim 8**, Terakado and Eda teach all that is discussed above with regards to claim 1. Terakado further teaches what data is output and what data is not. According to the table of Figure 7, the program category can determine which data is output using the screen layout information [col. 8, lines 47-53]. This teaching meets the

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claimed ability for the output form to include at least an output condition of the sub contents.

Regarding **claim 9**, Terakado and Eda teach all that is discussed above with regards to claim 1. Terakado further teaches "Screen Layout Data (Standard)" [Fig. 3] that is used in the case that data of a screen layout is not supplied [col. 9, lines 6-10]. This teaching meets the claimed ability for the reception device to determine the output form of the sub contents in accordance with a predetermined output form when the output form ID is not a predetermined one.

Regarding **claim 10**, Terakado and Eda teach all that is discussed above with regards to claim 1. Terakado further teaches that the "A3 data" can include CM information (Commercial Message information) [col. 7, lines 32-35 & Fig. 5C]. This teaching meets the claimed fact that sub contents can be commercials.

Regarding **claim 11**, Terakado and Eda teach all that is discussed above with regards to claims 1. Terakado does not teach the fact that sub-contents can be emergency information. Eda teaches a system for displaying emergency information [col. 7, lines 11-19]. It would have been obvious to one of ordinary skill in the art at the time of the invention to use emergency information in place of the "Commercial Message Information" (as taught by Terakado) in order to allow for important emergency information to be sent to subscribers and displayed in a pre-formatted output form.

Regarding **claim 12**, Terakado teaches transmission of "Program Category" in the "A1 data", which meets the claimed output form ID (identification based on Figure 7)

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to indicate an output form layout. Broadcast Date, Time, Station, and other A data (A2 and A3 data), meet the claimed output contents [col. 6, line 60 – col. 7, line 31].

Terakado also teaches main contents data, in this case being the Broadcasting Date, Time, and Station. However, Terakado does not teach that the main contents and the sub contents (output form ID and output contents) are multiplexed. Eda teaches multiplexing video and audio streams (main contents), and information streams (sub contents) [col. 7, lines 12-26]. At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the intricate details of transmission and reception using a multiplexed system, as taught by Eda, into the system of Terakado, in order to allow for a simple way to transmit emergency information or commercials while still only using a single transport stream, therefore making the process compatible with current multiplexed transmission and reception system and as well as making it streamlined and straight-forward.

Regarding method **claim 15**, the claimed method for using a system including a transmission device and reception device is met by the above rejection of the system of claim 1.

Regarding method **claim 16**, the claimed method for generating a transport stream is met by the above rejection of the transmission device of claim 1.

Regarding method **claim 17**, the claimed method for reconstructing a transport stream is met by the above rejection of the reception device of claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon whose telephone number is (571) 272-7356. The examiner can normally be reached Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

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Knox Building
501 Dulany Street
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon
Examiner
Art Unit 2614

Michael R Shannon
May 9, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600